

Dkt. 1141/76238

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE****RECEIVED  
CENTRAL FAX CENTER****OCT 19 2010**

Application of: Taiga GOTO et al.

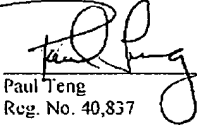
Application No.: 10/579,514

Group Art Unit: 2624

Filed: November 8, 2004

Examiner: Brian P. Werner

For: IMAGE PROCESSING METHOD, IMAGE PROCESSING DEVICE, COMPUTER  
AIDED DETECTION, AND METHOD FOR FILTERING ALONG THE TIME AXIS

I hereby certify that this correspondence is being transmitted by facsimile transmission to the U.S. Patent and Trademark Office at (571) 273-8300.	
	<b>October 19, 2010</b>
Paul Teng Reg. No. 40,837	Date

30 Rockefeller Plaza, 20<sup>th</sup> Floor  
New York, New York 10112  
Tel.: (212) 278-0400Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**COMMUNICATION IN RESPONSE TO  
SEPTEMBER 24, 2010 OFFICE ACTION**

This Communication is submitted in response to the September 24, 2010 Office Action issued by the U.S. Patent and Trademark Office which indicates that examination of the above-identified patent application will be restricted under 35 U.S.C. §121 to one of the following groups of claims (I, II or III):

- I. claims 1-9, 14, 15, 18 and 19, drawn to image reconstruction by pixel extraction along a time axis;
- II. claims 10, 11, 16 and 20-27, drawn to image reconstruction by pixel filtering along a time axis;
- III. claims 12, 13 and 17, drawn to image reconstruction by change detection and averaging along a time axis.

The Office Action also indicates that if group II is elected, examination will be restricted to one of the following species:

Taiga GOTO et al., Application No. 10/579,514  
Page 2

Dkt. 1141/76238

- IIA. claims 10, 11, 16, 20 and 21, drawn to filtering and weighting along a time axis;
- IIB. claim 23, drawn to sum of averages filtering along a time axis (specification paragraph 163);
- IIC. claim 24, drawn to weighted sum filtering along a time axis (specification paragraph 164);
- IID. claim 25, drawn to median filtering along a time axis (specification paragraph 165);
- IIE. claim 26, drawn to differential filtering along a time axis (specification paragraph 168);
- IIF. claim 27, drawn to pre-emphasis filtering along a time axis (specification paragraph 169).

Applicant hereby elects to prosecute group I. Claims readable on group I include pending claims 1-9, 14, 15, 18 and 19.

Applicant, however, respectfully requests reconsideration of the restriction requirement. Under M.P.E.P. §803, the application must be examined on the merits, even though it includes claims to distinct inventions, if the search and examination of an application can be made without serious burden.

Applicant submits that it would not be a serious burden if restriction is not required here, because there is substantial overlap amongst the three groups.

For example, each of the groups I-III involves inputting image data which arranged in time series.

Further, the aspects of (I) extracting pixels which satisfy a condition along a time axis from all the pixels arranged in time series (in group I), (II) performing a filtering process along the time axis on all the pixels arranged in time series (in group II), and (III) calculating an amount of change between a pixel value at a first time and a pixel value at a second time, and calculating an average value of pixel values from the first time to the second time in a region where the amount of change is a predetermined value or less (in group III) involve performing process along the time axis on the pixels arranged in time series, and therefore it would not be substantial burden to search and examine the aspects together.

Likewise, the aspects of (I) constructing an image based on the pixels extracted along the time axis (in group I), (II) constructing an image based on the pixels performed along the time axis (in group II), and (III) producing a processed image in which each pixel has the average

RECEIVED  
CENTRAL FAX CENTER

OCT 19 2010

Taiga GOTO et al., Application No. 10/579,514  
Page 3

Dkt. 1141/76238


value or the pixel value according to the amount of change (in group III) involve producing an image according to the result of performing along the time axis on the pixels arranged in time series, and therefore it would not be undue burden to search and examine the aspects together.

Therefore, applicant submits that search and examination of the Groups together would not be a serious burden. Accordingly, applicant respectfully requests that the restriction requirement be withdrawn.

If a petition for an extension of time is required to make this response timely, this paper should be considered to be such a petition. The Patent Office is hereby authorized to charge any required fees, and to credit any overpayment during prosecution of this application, to our Deposit Account No. 03-3125.

If a telephone interview could advance the prosecution of this application, the Examiner is respectfully requested to call the undersigned attorney.

Respectfully submitted,



Paul Teng, Reg. No. 40,837  
Attorney for Applicant  
COOPER & DUNHAM LLP  
30 Rockefeller Plaza, 20<sup>th</sup> Floor  
New York, New York 10112  
Tel.: (212) 278-0400